Installation and Operating Instructions

Zip Hydroboil® Plus

Instant boiling water

Stainless Steel model shown

203562	Zip Hydroboil Plus 3 Litre White	HP003
203561	Zip Hydroboil Plus 3 Litre Stainless Steel	HP103
205562	Zip Hydroboil Plus 5 Litre White	HP005
205561	Zip Hydroboil Plus 5 Litre Stainless Steel	HP105
207562	Zip Hydroboil Plus 7.5 Litre White	HP007
207561	Zip Hydroboil Plus 7.5 Litre Stainless Steel	HP107

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Note:

Read all instructions and precautions before proceeding. This unit must be installed in accordance with water supply by-laws and relevant local authority by-laws.

All plumbing and electrical installations must comply with local authority requirements.

Read These Warnings First

Please read all installation requirements, installation procedures and precautions before installing any Zip Hydroboil Plus instant boiling water heater.

Never attempt to install any Zip Hydroboil Plus instant boiling water heater without reading all of the applicable instructions.

In some hard water areas where mineral scale accumulation in the boiling chamber of the Zip Hydroboil Plus may become a problem, consideration should be given to the maintenance required. A suitable form of water treatment may be necessary.

All plumbing connections must be made in accordance with local regulations.

The Zip Hydroboil Plus instant boiling water heater is not intended for use by young children or infirm people without supervision.

Young children should be prevented from having access to ensure that they are not able to use or play with the heater.

If the installation site is located more than 1000 metres above sea level, the installer should contact a Zip authorised agent for high altitude settings.

This appliance must be earthed. If the power supply cord is damaged it must be replaced by a Zip authorised agent or a qualified electrician.

Do not remove the cover of the heater under any circumstances without first isolating the heater from the power supply.

Do not use strong, corrosive or abrasive cleaners to clean the case of the heater.

Frost protection: If this heater is located where ambient air temperature could fall below 5ºC when the heater is not in use, do not turn off the appliance electrically. This safeguard does not offer the same protection to the connecting pipework and fittings.

The ambient temperatures this unit must operate within is 5ºC - 50ºC.

This heater is intended only for indoor use and should never be installed outdoors or be exposed to the elements of nature.

This unit must not be positioned in an area that may be cleaned by a water jet. This unit must not be cleaned by a water jet.

Installation Requirements

Before installing, ensure that the following are available:

a) Sufficient space to position the heater so there is at least 150 mm clearance above the heater for service access, 65 mm to its left and

20 mm to its right – the tap outlet usually should be positioned at least

200 mm above a draining board or drip tray.

b) Standard local requirement power cable positioned as shown on the paper mounting template for connection from the rear of the heater to the terminal block within the heater, this will require an isolating switch fitted in the fixed wiring and attached to a secure surface. This switch must provide all pole disconnection and a contact separation of at least 3mm installed in accordance with the wiring rules. Alternatively a standard 220-240V, 13 amp fused spur, within 1500 mm of the Hydroboil Plus Unit.

NOTE: When installed with a plug and cord the plug must be accessible

c) Cold water supply with a minimum working pressure of 0.7 bar and a maximum working pressure of 7 bar connected via an isolation valve.

Installation Requirements (continued)

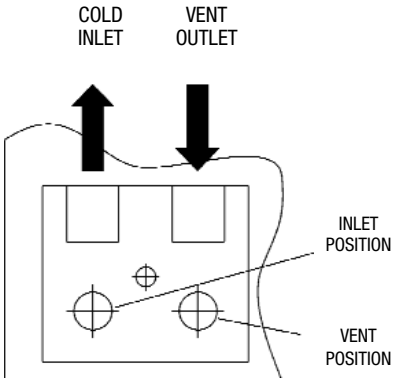
d) Outlet drainage to a sink draining board or to a drip tray.

e) Access to drainage from a vent situated at the base of the heater.

f) In all installation instances the walls of the heater must be vertical and the base horizontal, there can be no exceptions to this rule.

Note: If the water pressure is likely to exceed 7 bar, a 3.5 bar pressure reducing valve must be installed in the cold water supply line.

Installation procedure



Before You Begin

Locate the paper mounting-hole template packed with the heater.

Read the installation and operating instructions completely.

Decide whether to install with concealed or exposed plumbing and/or electrical connections. Concealed connections are preferred for superior appearance.

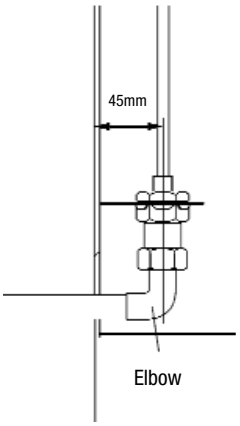
Step 1 – Positioning

Position the heater so the tap will drain on to a draining board or drip tray.

Position the base of the tap to be not less than 200 mm above the draining board (height should be increased only if essential for filling larger vessels).

Provide clearance for service access of not less than 150 mm top, 65 mm left, 20 mm right.

Mark corner positions for the heater on the wall so as to position the paper mounting-hole template.



Step 2 – Fastening

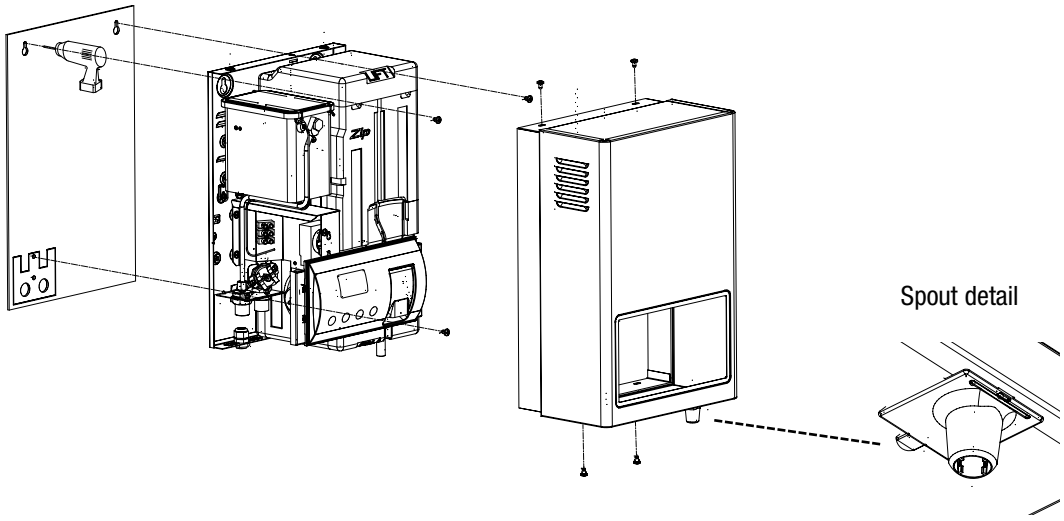
Position mounting-hole template on wall and drill holes where shown.

Drill holes for water inlet, vent outlet and wiring if rear access is intended.

Remove cover fastening screws from heater and lift whole cover off heater.

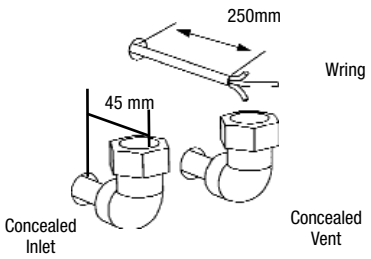
Install plumbing and wiring and prepare pipe ends and wiring ends as shown.

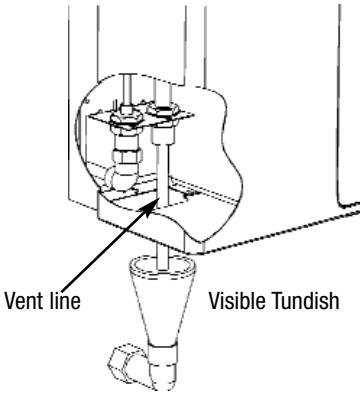
Screw heater chassis to the wall using screws or bolts suited to the wall.



Aprox weight when filled

3.0 Litre models	12.5 kg
5.0 Litre models	16.5 kg
7.5 Litre models	20.5 kg





Special Note

Ensure the silicon outlet tube is correctly positioned within the outlet nozzle. Failure to do this may cause internal flooding.

Screws or bolts must be able to support the weight as shown in the chart on the left.

Step 3 – Connecting

a) Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the heater directly to the 15 mm or half-inch compression fittings with the nuts and olives provided.

For concealed plumbing connections, connect the cold water pipe through the rear of the chassis using a 15 mm or half-inch capillary elbow.

Cold water pipes must be flushed before connection to the inlet. Any clogging due to sediment or fines will adversely affect the operation of the heater.

The heater must be installed with an isolating valve which allows it to be isolated from the mains supply for servicing.

Water pressure requirements:

Minimum - 0.7 bar, maximum - 7 bar.

Warning: If pressure is likely to exceed 7 bar, a pressure limiting valve must be installed in the cold water supply line. Zip recommends a valve rated at 3.5 bar for this application.

b) Venting

A vent at the base of the heater must be plumbed to a safe visible location as, under certain conditions, it may discharge cold or boiling water and/or steam.

For exposed vent plumbing, connect vent outlet from the base of heater to a 15 mm or half inch OD pipe which has a continuous fall, is no more than 3 metres long, has no more than 3 right angle bends, and discharges to a waste water drain.

For concealed vent plumbing, direct the vent outlet from the heater rear, using a visible tundish. (see diag at left)

c) Electrical

For concealed electrical connection, connect a power cable through the rear access opening of the heater to the terminal block within the heater as shown.

For exposed electrical connection, connect the flex to a fused spur on the wall within 1500 mm of the heater that will adequately cater for the units power needs.

Do not turn the power ON until the heater is filled to the tap level, with water.

Step 4 – Assembling

Place the heater case back on to the heater and secure the top 2 case screws. Secure two bottom case screws.

Step 5 – Commissioning

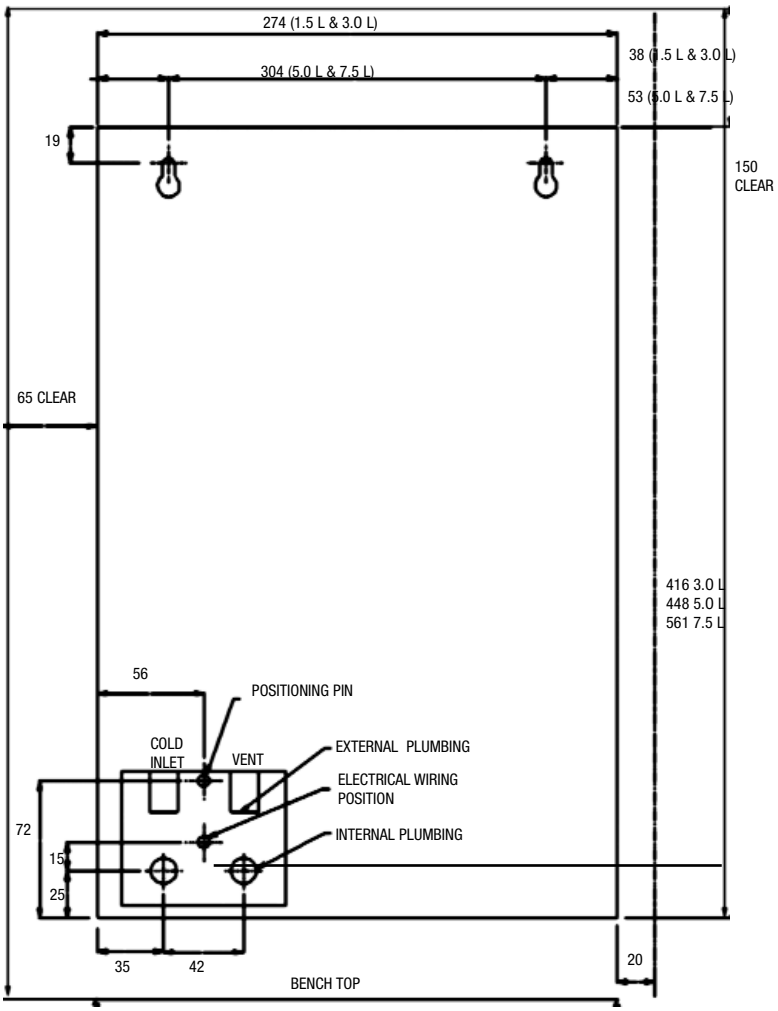
Check previous steps. Turn water supply ON. Water is now flowing into heater, check connections for leaks. Wait approximately 5 minutes and check outlet tap for water. This is achieved by pressing the tap paddle.

Power is only to be turned on when water is available from this outlet.

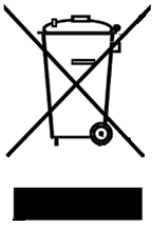
Turn power ON. After a short period, boiling water will be available and will be maintained close to boiling point thereafter. Initial heating periods are shown in the table on the left.

Inlet water temperature	**15°C**	**10°C**
3.0 Litre models	16 min	17 min
5.0 Litre models	16 min	17 min
7.5 Litre models	23 min	24 min

Wall Mounting Template Dimensions



End of life Disposal



The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for the collection and recycling of unwanted electrical and electronic equipment.

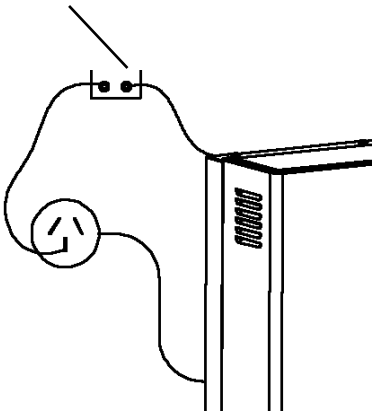
In order to help preserve our environment we ask that you dispose of this product correctly. Please contact Zip customer services for advice on 0845 602 4533

Problem Solving

Sympton	Possible Cause	Solution
Fails to dispense water.	Water isolating valve turned off. Blocked filter, blocked meter tube, blocked strainer, jammed ball valve assy, airlock in transfer tube.	Check water supply valve. Contact Zip authorised agent.
Water not boiling.	No power. Faulty PCB, faulty NTC, faulty element, faulty cutout.	Check power supply. Contact Zip authorised agent.
Runs out of boiling water and fails to refill. Outlet tap drips. Overflow from vent. Excessive steam from vent. Power “on” but no heat. Overload repeatedly tripping with excessive steam. Overload repeatedly tripping without excessive steam.	Internal adjustment.	Contact Zip authorised agent.

Earthing Continuity Verification

If required, an earth continuity test can be performed by testing between the earth pin on the products lead and a exposed piece of metal on the case.



Warning: this appliance must be earthed.

Following remedial service the earthing continuity of the heater must be checked by a qualified technician using an appliance tester, or continuity tester of accuracy Class 5 or better. Class 5 denotes an accuracy of 5% full scale deflection.

1. Isolate power supply.
2. Set meter to 0 ohm with leads connected together.
3. Connect one test lead to the earth pin on the three pin plug.
4. Connect the other test lead to a bare patch of metal (preferably on the edge) of the top of the cover, then to the front cover of the unit.

Warning- the water may be boiling - show extra care.

5. Test that in every instance the electrical resistance does not exceed 1 ohm.

Operating Procedures

Tap Operation

Safety feature.

Zip Hydroboil Plus has a unique safety device designed to reduce the incidence of accidental operation of the tap.The tap can be “Locked” to prevent the Hydroboil Plus from dispensing hot water

In order to “lock” the tap, ensure the safety button is protruding from the right hand side of the control panel and the locked indicator is illuminated

This can be achieved by pressing the button and simultaneously rotating it until the groove in the head of the button faces toward the body of the appliance. In this position an internal spring will push the button out. Once the button is in the extended position, the tap will be “Locked” and unable to dispense hot water.

Disengage safety feature.

Press and simultaneously rotate (aprox 90 degrees) the safety button on the right hand side of the control panel, until it latches in the closed position, and the unlocked indicator is illuminated.

Warning: The unit is now capable of dispensing boiling water without the safety feature.

Dispensing Boiling water:

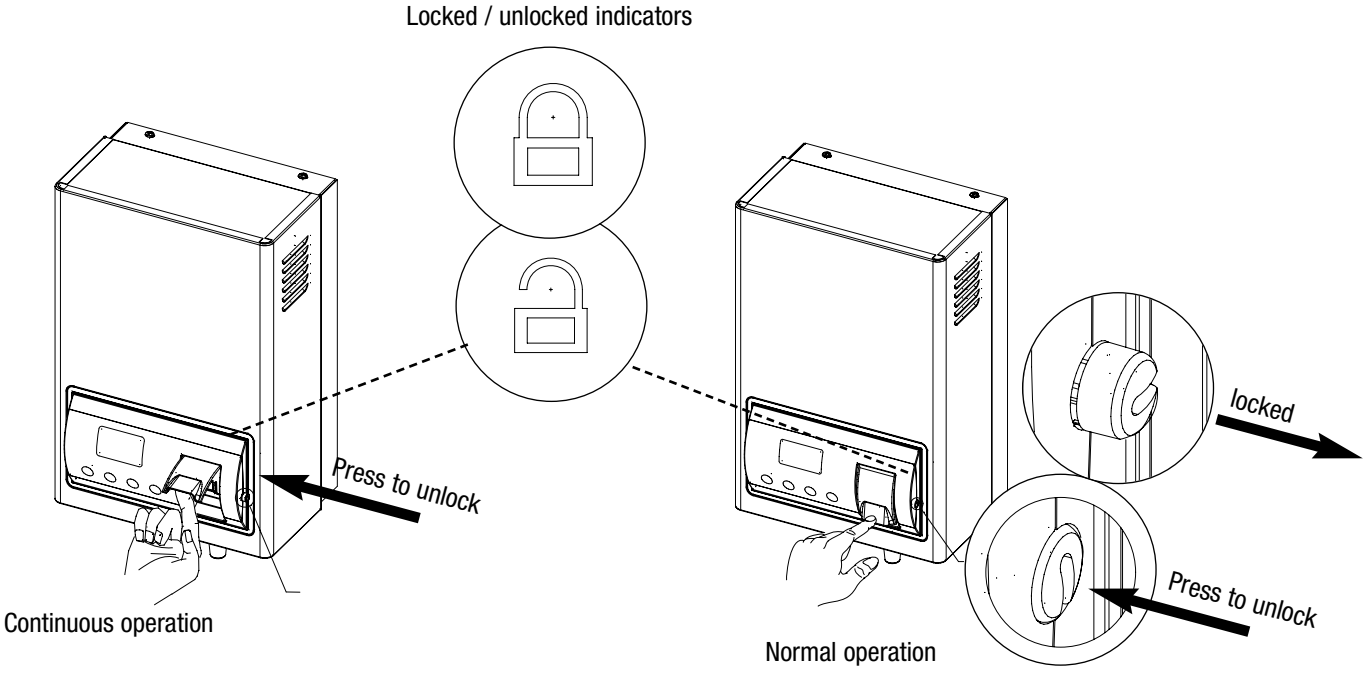
Zip Hydroboil Plus is fitted with a safety, two-way cool-touch safety tap for instant boiling water.

Normal operation (for filling cups and small containers)

To activate the tap, press the safety button on the right side of the control panel and while holding the button in, gently push the lower end of the tap paddle inwards and boiling water will flow until the tap paddle is released.

Continuous operation (for filling, tea pots, saucepans and large containers)

Press the safety button on the right side of the control panel and while holding the button in, Lift the tap paddle until it locks into a horizontal position, the button can now be released and boiling water will flow until the paddle is returned to its normal vertical position. This operation allows a vessel to be filled without holding your hand where it may be affected by steam.



Operating Procedures (setting the controls)

DESCRIPTION

The Electronic Hydroboil Plus has user interface that consists of a graphic LCD and 4 Capacitive Sensor Switches, (CSS). The user interface gives the current status of the Hydroboil Plus and allows the user to configure it as required.

Legend:

1 = ZIP Symbol

2 = Day of the Week indicator

3 = Setpoint Value

4 = CHANGE FILTER indicator

5 = ON indicator

6 = OFF indicator

7 = Sleep Symbol

8 = Sleep mode (Stand by) indicator

9 = Low light Symbol

10 = 24hour Clock

11 = BOILING WATER indicator

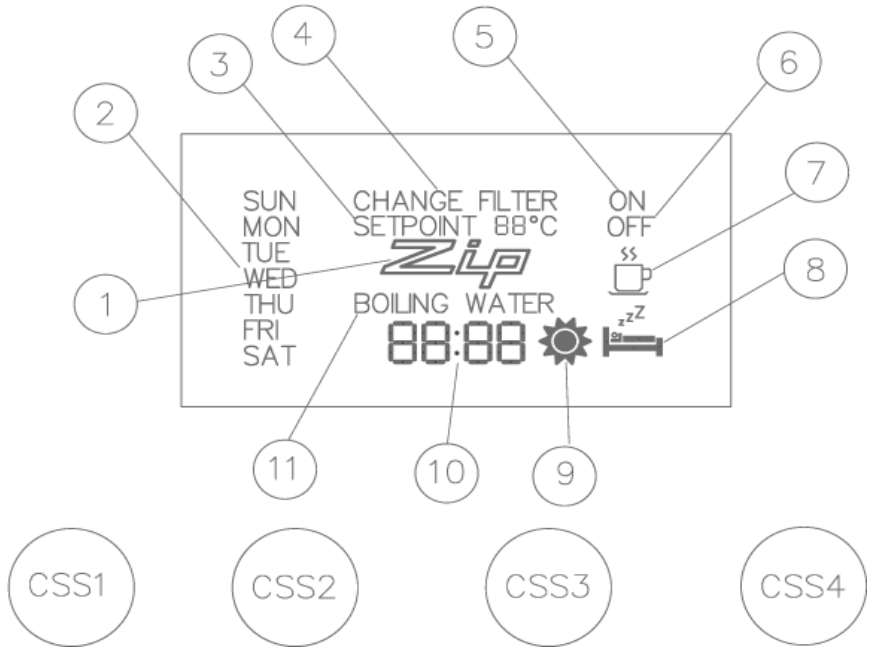
CSS1 = Capacitive Sensor Switch 1

CSS2 = Capacitive Sensor Switch 2

CSS3 = Capacitive Sensor Switch 3

CSS4 = Capacitive Sensor Switch 4

The user interface is shown below.



The LCD and capacitive sensor switches connect to the Controller PCB via a 4-way serial cable.

The DIP Switches on the Controller PCB should be configured as follows.

SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
NU	NU	NU	ON	OFF	ON	ON	ON

Where NU = Not Used (either position is acceptable)

The Electronic Hydroboil Plus has a real time clock that operates in 24 hour mode, and can have 2 ON-OFF times per day. If the user selects either of the energy saver modes, (see below), ON-OFF mode cannot be used, (The user is not able to access this part of the configuration). The real time clock is battery backed meaning the unit does not loose the configuration data if power is removed.

The Hydroboil Plus has two energy saver (stand by) modes that can be used in an either/or configuration. The energy saver modes differ from on/off mode in that the water in the tank is maintained at 65ºC rather than allowing it to drift back to ambient.

1) Sleep Mode, and
2) Low Light Mode.

Sleep Mode can be set to 2 hours or 4 hours.

Sleep Mode is indicated by the Sleep symbol on the LCD.

Low Light Mode is indicated by the Low Light symbol on the LCD.

When the unit actually enters energy saver mode it is indicated by the Sleep Mode Indicator on the LCD.

Default settings

In 2 Hour Sleep Mode, if there has been no water drawn through the tap or no touches of the capacitive switch sensors for two hours, the temperature of the water in the tank will be allowed to drop to and be maintained at 65ºC. (The time taken for the water temperature to drop to 65ºC can be as much as 12 hours depending on ambient conditions and other external factors).

In 4 Hour Sleep Mode, if there has been no water drawn through the tap or no touches of the capacitive switch sensors for four hours, the temperature of the water in the tank will be allowed to drop to and be maintained at 65ºC.

As soon as water is drawn through the tap, or there is a touch on the capacitive switch sensors, the Hydroboil Plus returns to full power mode.

In Low Light Mode, as soon as the ambient light (in the room where the Hydroboil Plus is installed) drops below 100lux, the unit goes into energy saver mode and will allow the temperature of the stored water to drop to and be maintained at 65ºC. As soon as the ambient light rises above 100lux, the Hydroboil Plus returns to full power mode.

A normal office has an ambient light level of 200-300lux.

The Default configuration for the Hydroboil Plus is as follows.

TEMPERATURE SETPOINT:	98ºC
FILTER TIMER:	OFF
SLEEP MODE:	OFF
LOW LIGHT MODE:	OFF
SUN ON TIME 1:	--:--
SUN OFF TIME 1:	--:--
SUN ON TIME 2:	--:--
SUN OFF TIME 2:	--:--
MON ON TIME 1:	08:00
MON OFF TIME 1:	--:--
MON ON TIME 2:	--:--
MON OFF TIME 2:	--:--
TUE ON TIME 1:	--:--
TUE OFF TIME 1:	--:--
TUE ON TIME 2:	--:--
TUE OFF TIME 2:	--:--

WED ON TIME 1:	--:--
WED OFF TIME 1:	--:--
WED ON TIME 2:	--:--
WED OFF TIME 2:	--:--
THU ON TIME 1:	--:--
THU OFF TIME 1:	--:--
THU ON TIME 2:	--:--
THU OFF TIME 2:	--:--
FRI ON TIME 1:	--:--
FRI OFF TIME 1:	--:--
FRI ON TIME 2:	--:--
FRI OFF TIME 2:	--:--
SAT ON TIME 1:	--:--
SAT OFF TIME 1:	--:--
SAT ON TIME 2:	--:--
SAT OFF TIME 2:	--:--

Setting operational modes

The Hydroboil Plus has 2 modes of operation:

1).Normal operation mode 2). Configuration mode

Normal mode

Normal display

In Normal operation mode the LCD will display as follows:

Note: The BOILING WATER symbol is not displayed until the water reaches temperature.

Configuration mode

To enter Configuration Mode, press and hold the CSS1 and CSS4 for 10 seconds. The unit enters Configuration Mode and the user can configure the clock as follows.

SET SETPOINT

Setpoint display

To return to Normal Mode, press CSS4.

To increment the setpoint, press either CSS2 or CSS3.

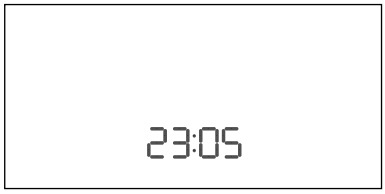
To step to the next configuration parameter, press CSS1.

Note 1: The setpoint moves in a circular fashion. It goes from 98 to 99 to 100 to 65 to 66 etc.

Note 2: 100ºC is indicated by 1H on the LCD

SET CLOCK

Clock display



To return to Normal Mode, press CSS4.

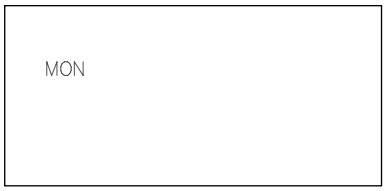
To increment the Hours, press CSS2.

To increment the Minutes, press CSS3.

To step to the next configuration parameter, press CSS1.

SET DAY-OF-THE-WEEK

Day display



To return to Normal Mode, press CSS4.

To step to the next day of the week, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

SET FILTER EXPIRATION TIME

Filter display

To return to Normal Operation, press CSS4.

To increment the expiration time, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

Note 1: The Filter expiration time moves in a circular fashion. It goes from OFF to 00 to 01 to 02 etc, etc.

Note 2: 00 is a test mode. When the user returns to Normal Operation, the CHANGE FILTER icon will appear on the LCD after approximately 1minute. To clear the CHANGE FILTER icon, the user must re-enter Configuration, set the Filter Expiration Time to OFF and return to Normal Operation.

CONFIGURE SLEEP MODE

Sleep display

To return to Normal Mode, press CSS4.

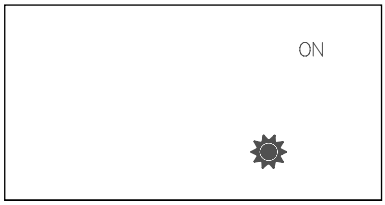
To configure sleep mode to kick in after 4 hours, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

Note: Configuring Sleep Mode moves in a circular fashion. It goes from 2 hours to 4 hours to OFF and back to 2 hours etc.

ENABLE LOW LIGHT SENSOR

Daylight saving display



To return to Normal Operation, press CSS4.

To configure Low Light Sensor ON/OFF, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

Note 1: Daylight Sensor ON/OFF flip flops with each press of CSS2 or CSS3.

Note 2: If either Sleep Mode or Low Light sensor is configured as on, pressing CSS1 will return the user to Normal Operation.

Note 3: If both Sleep Mode and Low Light sensor is configured as off, the user will be able to use ON-OFF mode.

Sun on-time display

SUN ON-TIME 1

To return to Normal Mode, press CSS4.

To increment the hour for SUN ON-TIME 1, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

SUN OFF-TIME 1

Sun off-time display

To return to Normal Mode, press CSS4.

To increment the hour for SUN OFF-TIME1, press either CSS2 or CSS3.

To step to the next configuration parameter, press CSS1.

Note: If ON TIME = OFF TIME this disables the timer.

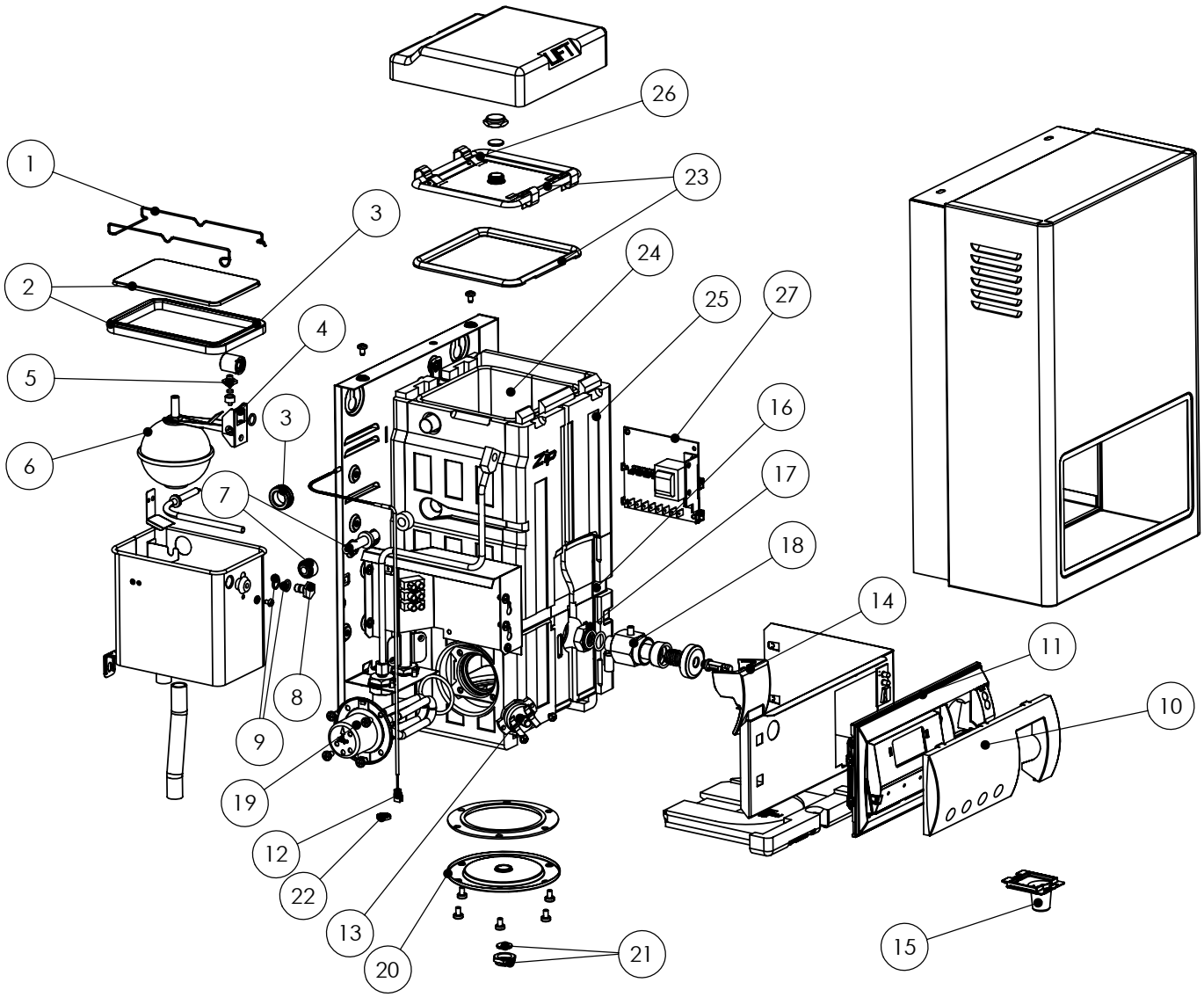
Note: The same procedure is followed for all the ON-OFF time periods.

If no action is sensed on the CSS's for 20 seconds, the unit will revert to Normal Mode.

After SAT OFF-TIME 2 pressing either CSS1 or CSS4 will revert the unit to Normal Mode.

Item	Kit No.	Description
1	90487	Cistern Lid Clamp Kit
2	90488	Cistern Lid and Gasket Kit
3	90490	Gasket Kit Hydroboil
4	90083	Float Valve Kit with Float
5	90069	Jumper Valve Kit with Seals
6	90102	Cistern Float Kit with Nut and Screw
7	90493	Metering Tube Kit 1500W
7	90494	Metering Tube Kit 2400W
8	90495	Banjo Screw Hydroboil
9	90496	O-Ring Kit Hydroboil
10	90743	Fascia Lens Kit Electric
11	90742	Fascia Assy Electric Grey
12	90620	Sensor Probe Econoboil Hot Tank Kit HTAP
13	90579	Overload Kit
14	90732	Tap Handle Kit
15	90745	Outlet Nozzle Kit
16	90503	Strap and Key Kit 3Litre Hydroboil
16	90504	Strap and Key Kit 5L& 7.5Litre Hydroboil
17	90505	Tap Nut Kit
18	90509	Tap Body Kit
19	90485	Element Kit 1500W / 240V
19	90486	Element Kit 2400W / 240V
20	90491	Cleaning Hole Cover Kit
21	90492	Drain Cap and Seal Kit
22	90107	Filter Kit Cold Inlet Bush
23	90131	Lid, Gasket and Clips Kit 3Litre
23	90132	Lid, Gasket and Clips Kit 5 & 7.5Litre
24	90142	Tank Welded Kit 3Litre
24	90734	Tank Welded Kit 5Litre
24	90735	Tank Welded Kit 7.5Litre
25	90147	Insulation Kit 3Litre
25	90736	Insulation Kit 5Litre
25	90737	Insulation Kit 7.5Litre
26	90130	Clips for Curled Tank Kit
27	90744	PCB Kit Hydroboil 2006

Spare Parts



Warranty Information

Certain warranties may be implied by law into your contract with Zip. The warranty provided below is additional to these implied warranties and nothing set out below shall limit your statutory rights or rights at law.
Zip Heaters (UK) Ltd warrants that, should any part fail within 24 calendar months of installation, that part will be repaired or replaced free of charge by Zip or its Distributor or Service Provider, except as set out below, provided the appliance is installed and used strictly in accordance with the instructions supplied, and that failure is not due to accident, misuse, abuse, unsuitable water conditions, or to any alteration, modification or repair by any party not expressly nominated by Zip.

No costs are payable by the customer other than any mileage or travelling-time charges incurred by a Zip Service Provider or the cost of removal, cartage and re-installation of any component of the appliance if it needs to be returned for repair to Zip or its Distributor.

This warranty does not cover damage resulting from non-operation of the appliance, the use of non authorised parts or consequential damage to any other goods, furnishings or property.

No warranty applies to the life of any filtration cartridge installed with the appliance as cartridge life may vary according to water quality and the rate of water consumption.

Zip does not exclude, restrict or modify any liability that cannot be excluded, restricted or modified or which cannot, except to a limited extent, be excluded, restricted or modified as between the owner or user and Zip under the laws applicable.

Furthermore, this warranty does not displace any statutory warranty, but, to the extent to which Zip is entitled to do so, the liability of Zip under any statutory warranty will be limited at Zip's option to the replacement of the appliance or supply of equivalent appliance, the payment of the cost of replacing the appliance or acquiring an equivalent appliance, or the payment of the cost of having the appliance repaired or the repair of the appliance.

Registering Your Purchase

Registering your Zip installation on the Zip website may help to establish date of installation should it become necessary to service the appliance under terms of the Zip warranty. To register your installation go to www.zipheaters.co.uk and look under the heading "Warranty".

As Zip policy is one of continuous product improvement, changes to specifications may be made without prior notice. Images in this booklet have been modified and may not be true representations of the finished goods.

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